- [HP to MSO HHs%] = ((sum([Adj HP])) / (sum([MSO HHs])))

Applying these multipliers to [Total HHs] of all of the counties that did not have MSO data as a basis, by joining these counties to the aggregated data of the counties that did have usable MSO data by Region, State and CountySize, we computed:

- [MSO HHs] = ([Total HHs] * [MSO HHs to Total HHs%])
- [HP by MSO HHs] = ([Total HHs] * [MSO HHs to Total HHs%] * [HP to MSO HHs%])
- [HP by Total HHs] = ([Total HHs] * [HP to MSO HHs%])

From these values, HNP were calculated as:

- [NP of MSO HHs] = ([MSO HHs] – [HP by MSO HHs])
- [NP of Total HHs] = ([Total HHs] – [HP by Total HHs])

For example, if all the "A" counties in Michigan with usable MSO data had an aggregated [Total HHs] equal to 1,382,095 and an aggregated [MSO HHs] equal to 597,629 and an aggregated [Adj HP] equal to 444,844, then the [MSO HHs to Total HHs%] of Michigan "A" counties would equal (approximately) 43.24% and the [HP to MSO HHs%] would equal (approximately) 74.44%. Thus, the projected values for all of the Michigan "A" counties that did not have any MSO ZIPs, using those counties' specific [Total HHs], were calculated as:

- [MSO HHs] = ([Total HHs] * 0.4324)
- [HP by MSO HHs] = ([Total HHs] * 0.4324 * 0.7444)
- [HP by Total HHs] = ([Total HHs] * 0.7444)

5. Determine Projections of Counties w/out MSO Data Based on Region and County Size

What remained were a few counties that did not have any MSO data and that did not have a Region, CountySize <u>and</u> State corresponding to the multipliers calculated in step 4. The only thing left to join these counties on was Region and CountySize. We went through the same process as step 4 to determine [MSO HHs to Total HHs%] and [HP to MSO HHs%] by Region and CountySize based on aggregated [MSO HHs], [Total HHs] and [Adj HP] for each Region and CountySize of the counties with MSO data, and applied those multipliers to the remaining counties that had not yet had projections calculated.

For example, Arkansas, a Southeast state, did not have any "C" counties with any useable MSO data. All the "C" counties in the Southeast with usable MSO data had an aggregated [Total HHs] equal to 3,176,480 and an aggregated [MSO HHs] equal to 2,665,662 and an aggregated [Adj HP] equal to 2,172,601. Therefore, the [MSO HHs to Total HHs%] of Arkansas "C" counties would equal (approximately) 83.92% and the [HP

to MSO HHs%] would equal (approximately) 81.50%. Thus, the projected values for all of the Arkansas "C" counties that did not have any MSO ZIPs, using those counties' specific [Total HHs], were calculated as:

- [MSO HHs] = ([Total HHs] * 0.839187)
- [HP by MSO HHs] = ([Total HHs] * 0.839187 * 0.8150)
- [HP by Total HHs] = ([Total HHs] * 0.8150)

Once this was completed and all counties in the US had projected MSO HHs and HP, HNP for each county was computed as
- [NP of MSO HHs] = ([MSO HHs] – [HP by MSO HHs])
- [NP of Total HHs] = ([Total HHs] – [HP by Total HHs])

Final Prep

The result is a projection of likely households passed by cable and likely households NOT passed by cable based on likely MSO presence, or penetration, in each US county based on county size in each of the geographic designations.

The final results were copied and pasted into an Excel spreadsheet. Columns were added to compute the ratios of MSO HHs to Total HHs, HP (based on MSO HHs) to MSO HHs, and HNP (based on MSO HHs) to MSO HHs. The data was grouped onto separate worksheets for each region, and grouped by State within each region. Finally, aggregate values for the A, B, C and D counties of each State was placed at the start of each State's data.

Of course, headers, footers and logo were appropriately placed on each worksheet, and each worksheet was set to landscape format with the appropriate margins to provide the client with a "single page" view of the data without the need for their intervention or formatting, should they choose to print any of the worksheets out.

EchoStar and DIRECTV Local-Into-Local Timeline

January 1998   Echostar commences local services in 6 markets

August 1998   Echostar commences local services in 5 more markets

May 1999   DirecTV announces *plans* to offer local services in 2 markets (after legislation passes)

September 1999   DirecTV updates previous statement to announce *plans* for local service in 20 markets

November 1999   DirecTV and Echostar both applaud passage of SHVA
Echostar commences local services to 13 markets
DirecTV commences local services to 2 markets

December 1999   Echostar commences local services in 5 additional markets
DirecTV commences local services in 15 additional markets

January 2000   Echostar commences local services in 3 additional markets (total – 21)
DirecTV commences local services in 2 additional markets (total – 16)

February 2000   Echostar commences local services in 3 additional markets
DirecTV commences local services in 2 additional markets

March 2000   Echostar commences local services in 2 additional markets (total – 26)
DirecTV commences local services in 5 additional markets (total · 23)

April 2000   Echostar commences local services in 2 additional markets

May 2000   DirecTV announces *plans* to offer local services in 12 additional markets

June 2000   Echostar commences local services in 1 additional market
DirecTV commences local services in 4 additional markets

July 2000   Echostar commences local services in 1 additional market
DirecTV commences local services in 3 additional markets

August 2000   DirecTV commences local services in 1 additional market

September 2000   Echostar commences local services in 2 additional markets (total – 32)
DirecTV commences local services in 4 additional markets (total – 35)

October 2000   Echostar commences local services in 1 additional market

November 2000   Echostar commences local services in 1 additional market
DirecTV commences local services in 2 additional markets

December 2000   DirecTV commences local services in 3 additional markets

October 2001   DirecTV – Echostar merger proposal announced

December 2001   Echostar announces *plans* to offer additional local channels in 36 markets
DirecTV announces *plans* to offer additional local channels in 39 markets

January 2002   DirecTV announces *plans* to offer local services in 10 additional markets in 2002